Stock #: 647699 SPEC 45302

CU 600/1000V XLPE Insulation ARMOR-X[®] Thermoplastic LSZH-TP Jacket XHHW-2. VFD Cable - CT Rated -Sunlight Resistant - For Direct Burial - Silicone Free

Type MC-HL Power Cable 600 Volt Three Conductor Copper, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Continuous Corrugated Welded Armor - ARMOR-X[®], Thermoplastic Solonon® Low Smoke Zero Halogen (LSZH-TP) Jacket with Bare CU Ground

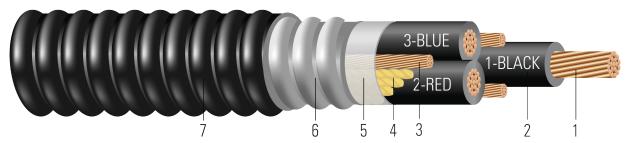


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- 1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and B8
- 2. **Insulation:** Cross Linked Polyethylene (XLPE) Type XHHW-2
- 3. **Grounding Conductor:** Class B compressed stranded bare copper per ASTM B3 and B8
- 4. **Filler:** Paper filler (cable size 8 & 6 uses Polypropylene filler)
- 5. **Binder:** Polypropylene tape
- 6. **Armor:** ARMOR-X[®] Continuous Corrugated Welded Armor
- 7. Overall Jacket: Thermoplastic Solonon® Low Smoke Zero Halogen (LSZH-TP) Jacket

APPLICATIONS AND FEATURES:

Southwire's 600 Volt Type MC-HL ARMOR-X[®] power cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, direct burial, aerial supported by a messenger, and where superior electrical properties are desired. These cables are capable of operating continuously at the conductor temperature not in excess of 90°C for normal operation in wet and dry locations, 130°C for emergency overload, 250°C for short circuit conditions, and -50°C for cold bend. For uses in Class I, II, and III, Division 1 and 2 hazardous locations per NEC Article 501, 502, and 503. Cables with 3 ground wires suitable for VFD application.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1569 Metal-Clad Cables
- UL 1685 Vertical-Tray Fire Propagation and Smoke Release Test (1/0 and Larger)
- ICEA S-58-679 Control Cable Conductor Identification Method 3 (1-BLACK, 2-RED, 3-BLUE)
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test







SPEC 45302 Stock #: 647699

SAMPLE PRINT LEGEND:

 $\{ SQFTG_DUAL \} \ SOUTHWIRE \$ \ \{ UL \} \ ARMOR-X \$ \ TYPE \ MC-HL \ 3/C \ XXX \ AWG \ (XX\{mm2\}) \ CU \ XHHW-2 \ GW \ 3 \ X \ AWG \ 90°C \ ARMOR-X \$ \ TYPE \ MC-HL \ 3/C \ XXX \ AWG \ (XX\{mm2\}) \ CU \ XHHW-2 \ GW \ 3 \ X \ X \ AWG \ 90°C \ ARMOR-X \$ \ YPE \ MC-HL \ 3/C \ XXX \ AWG \ (XX\{mm2\}) \ CU \ XHHW-2 \ GW \ 3 \ X \ X \ AWG \ 90°C \ ARMOR-X \$ \ YPE \ MC-HL \ 3/C \ XXX \ AWG \ (XX\{mm2\}) \ CU \ XHHW-2 \ GW \ 3 \ X \ X \ AWG \ 90°C \ ARMOR-X \$ \ YPE \ MC-HL \ 3/C \ XXX \ AWG \ (XX\{mm2\}) \ CU \ XHHW-2 \ GW \ 3 \ X \ X \ AWG \ 90°C \ ARMOR-X \ AWG \ (XX\{mm2\}) \ CU \ XHHW-2 \ GW \ 3 \ X \ X \ AWG \ 90°C \ ARMOR-X \ AWG \ (XX\{mm2\}) \ CU \ XHHW-2 \ GW \ 3 \ X \ X \ AWG \ 90°C \ ARMOR-X \ AWG \ (XX\{mm2\}) \ CU \ XHHW-2 \ GW \ 3 \ X \ X \ AWG \ 90°C \ AWG \ (XX\{mm2\}) \ CU \ XHHW-2 \ GW \ 3 \ X \ X \ AWG \ 90°C \ AWG \ (XX\{mm2\}) \ AWG$ SOLONON® JACKET -40°C ST1 SUN.RES. DIR. BUR. FOR CT USE 600V IEEE1202/FT4 -- VFD -- {NOM}-ANCE Tipo MC XHHW-2 CT FT4

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Cond. Number	Strand Count	Diameter Over Conductor	Insul. Thickness	Ground	Dia. Over Armor	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight
	AWG/ Kcmil		No. of Strands	inch	mil	No. x AWG	inch	mil	inch	lb/1000ft	lb/1000ft
647699	4	3	7	0.225	45	1 x 8	0.920	50	1.020	439	718

All dimensions are nominal and subject to normal manufacturing tolerances

Table 2 – Electrical and Engineering Data

Stock Number	Cond. Size	Cond. Number	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 75°C	Capacitive Reactance @ 60Hz	Inductive Reactance @ 60Hz	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
	AWG/ Kcmil		inch	lb	Ω/1000ft	Ω/1000ft	MΩ*1000ft	Ω/1000ft	Amp	Amp
647699	4	3	7.1	1001	0.258	0.310	0.022	0.048	85	95

^{*} Ampacities based upon 2023 NEC Table 310.16. See NEC sections 310.15 and 110.14(C) for additional requirements.





[♦] Cable marked with this symbol is a standard stock item